



**TalkingData**  
Mobile · Data · Value

# *Behind The Great Wall*

*A Deep dive into the Chinese Mobile Gaming Market*

*Leo Cui, Founder & CEO*



**GDC**  
14



China's largest data service provider for Mobile Gaming



## Analytics

App Analytics



## TalkingGame

Analytics for mobile games



## AppCPA

Mobile Ad Tracking



## Insight

Market Intelligence

BIG DATA + MOBILE INTERNET



By the end of 2013,

Accessing **400m+** Smart Devices

Serving **5000+** Mobile Games





By the end of 2013,

Over **40%** top grossing chart of Appstore

Around **80%+** Midcore & Hardcore mobile games.





100%  
Top Publishers

90%  
Top Android  
Channels

80%  
Top Ad Networks

80%  
Smart Device  
Access

CPs



Publishers



Channels



AD Networks Operators



*1*

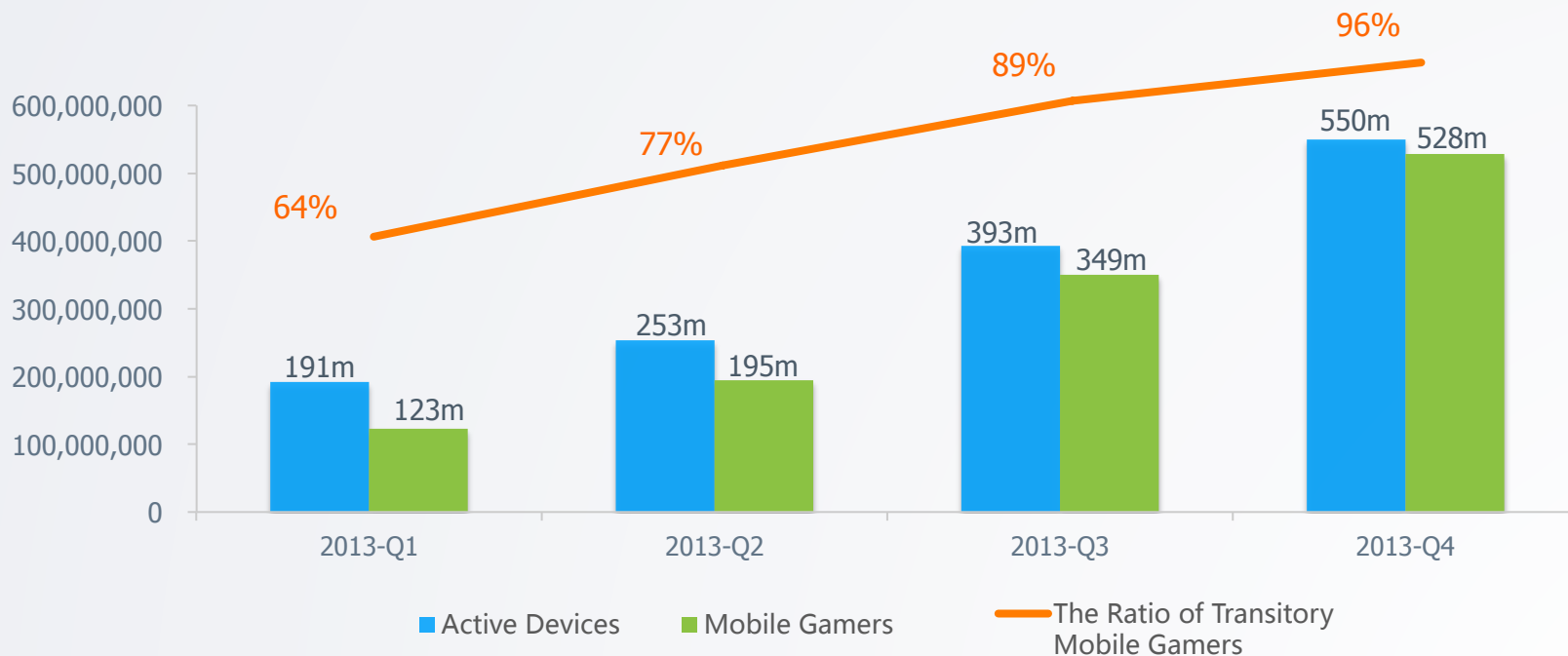
## *Market Stats in 2013*

*Total • Gamers • Spending • Devices • Revenues*

- **In 2013, China has become the largest market of mobile gaming.**

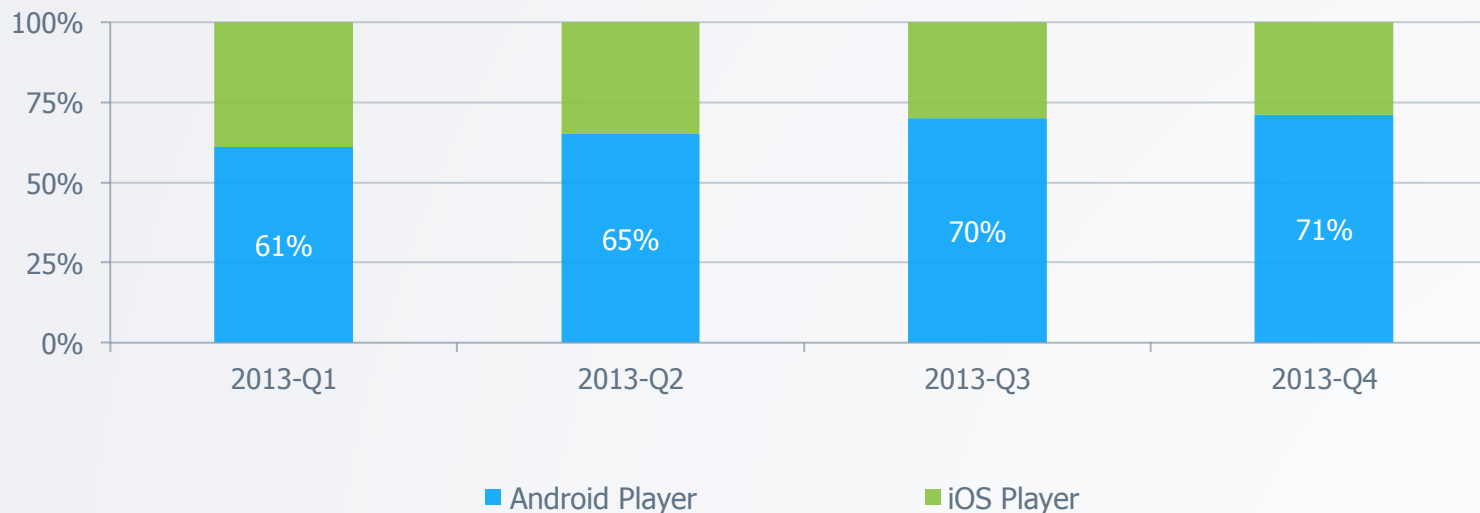
Total volume of smartphone users continued to rise in each quarter, doubling every six months.

Transitory mobile gamers (people who have played any kind of mobile games) grew in numbers, and the growth rate is **1.5** times that of the industry.



- **The most of growth come from low-end android devices**

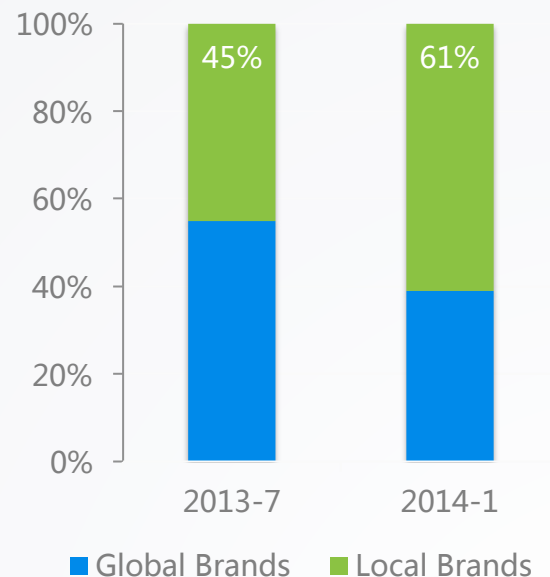
In 2013 , the ratio of Android and iOS distribution widened from 6:4 to 7:3.



- **The market of smartphones become more fragmented**

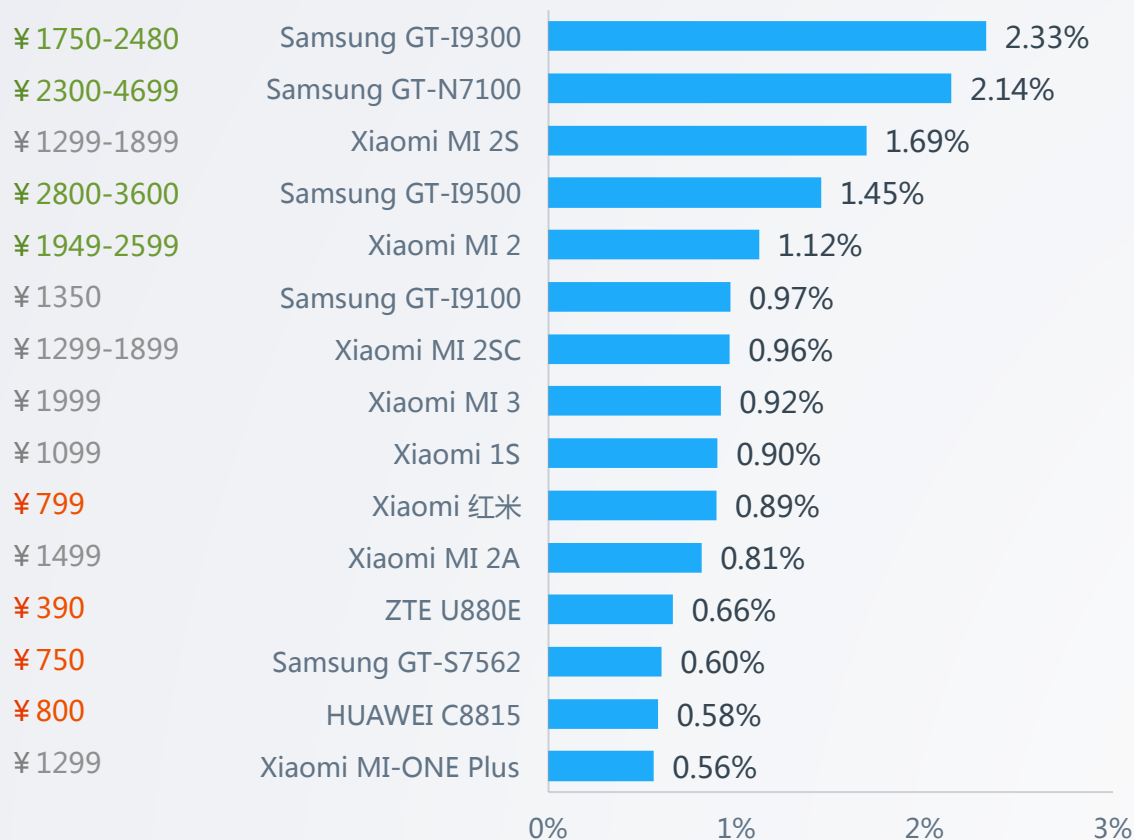
Market share of domestic brands of Android device reached nearly **2/3** ; And Total share of Top 10 brands is decreasing; Makes the device market more **FRAGMENTED**

Rank	Company	Share% -2014.1	6month before	
1	Samsung	28.67%	37.69%	-9.01%
2	Xiaomi	9.37%	5.34%	4.04%
3	OPPO	4.57%	2.38%	2.19%
4	HTC	3.87%	4.83%	-0.96%
5	BBK	3.78%	1.82%	1.96%
6	YuLong	3.27%	2.93%	0.34%
7	LENOVO	2.00%	3.47%	-1.48%
8	SONY	1.86%	2.68%	-0.82%
9	HUAWEI	1.86%	3.59%	-1.73%
10	GIONEE	1.61%	--	
	<b>TOP 10 Total</b>	<b>60.86%</b>	<b>66.49%</b>	<b>-5.63%</b>





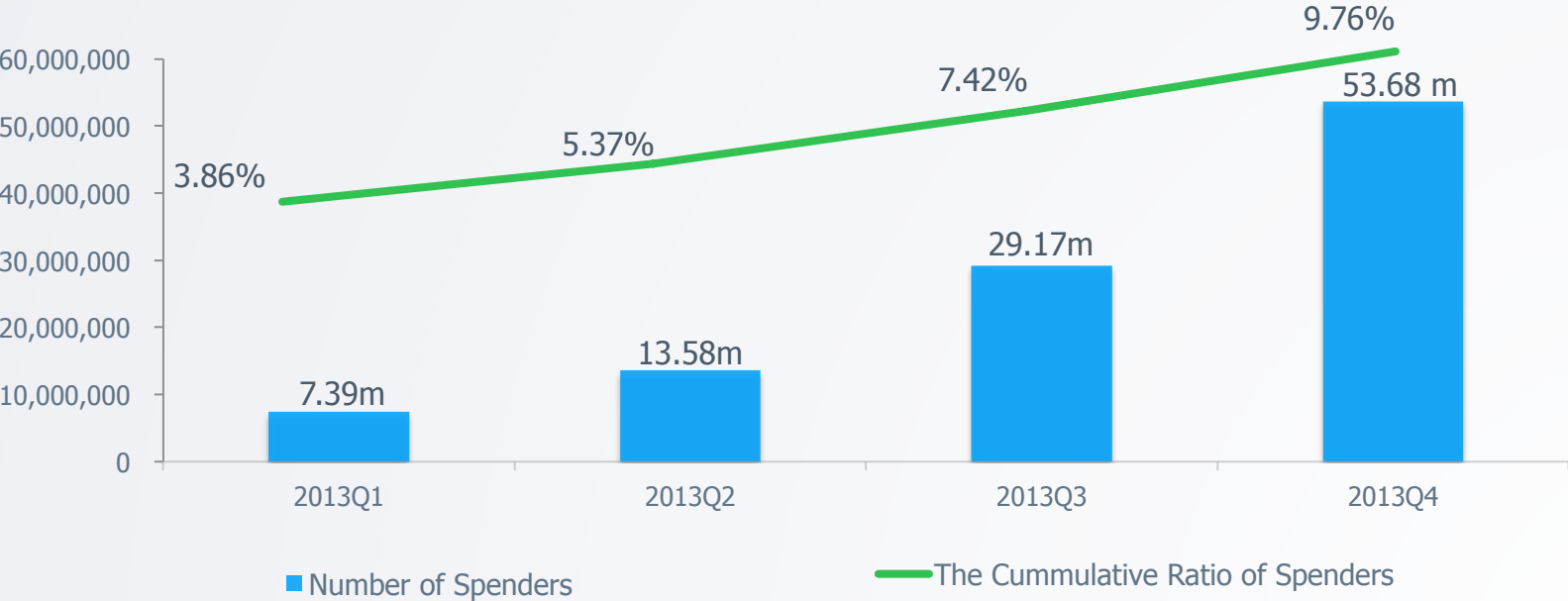
## ● Top Android device in China



- No single model exceeds **3%** market share in 2013; While Samsung had **4** models exceeding **5%** in 2012
- Fragmented by too many options that enjoy very close market share
- High-end ( **> ¥ 2000** ) is still the first choice for the majority; While low-end(**< ¥ 1000**)'s demand started increasing
- Xiaomi(8 in Top 15) Vs Samsung(5 in Top 15), **local competency** is getting stronger in a fast pace

# More and more people would like to pay for mobile games

The cumulative proportion of money spenders is **2.5** times that compared to the beginning of the year. The absolute number of money spenders has increased five times+.



# 2

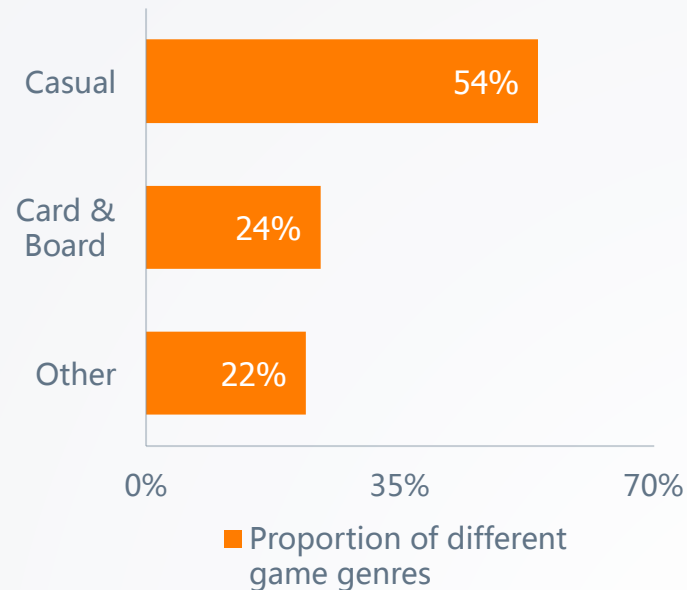
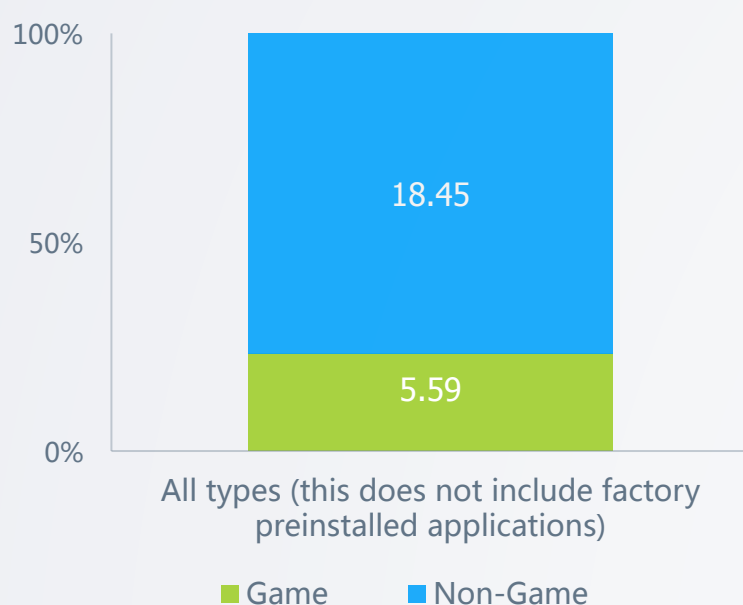
## *Deep into Player Behaviors*

*Install • Update • Gaming • Spending • Uninstall*

- **Casual games compose of a majority of all the game installations**

As of December 31, every active device has an average of **5.59** games installed. This represents **1/4** of the total number of apps per device.

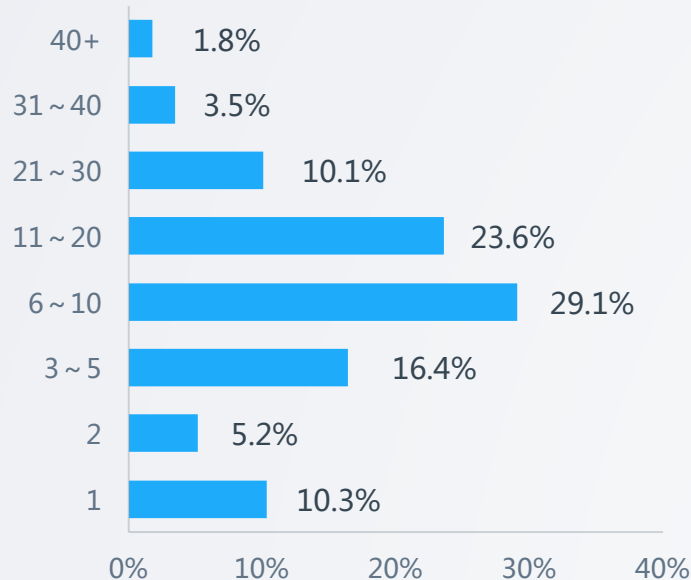
54% are casual games, 24% are strategy/card games, and 22% are other types of games.



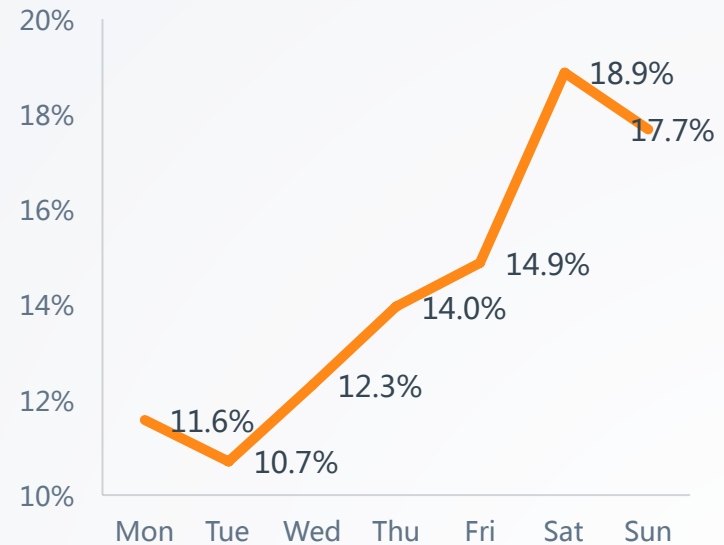
## Players install new games every **3.48** days on average

### Prefer to install over weekends

On average, a player installs a new game every **3.48** days. **30%** of players install **6 to 10** games per month. They prefer to download new games on their day off. The period between Friday evening and Sunday accounts for half of the week's installation.



■ Player distribution data based on game installation receipts in December

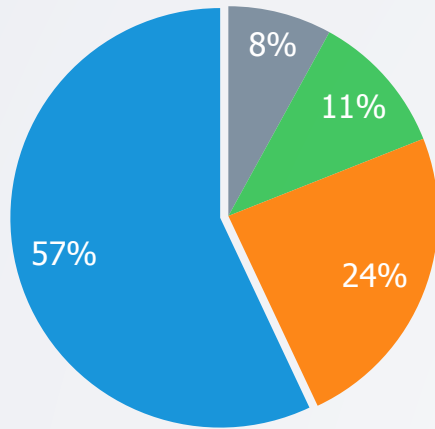


— Proportion of installations during the week



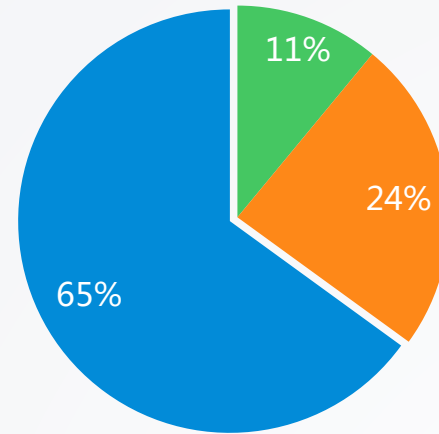
## Where do the players go to find new games to download and install?

Android gamers prefer to download games from **third-party markets** which bring 80% of the distribution volume; iOS gamers prefer to download from **official sources**, with 60% of the download coming from **App Store**.



**Android Distribution**

- Other
- Google Play
- Other 3rd Party App Stores
- Mobile Assistants



**iOS Distribution**

- Non-jailbreak App Stores
- Jailbreak Channels
- Apple AppStore

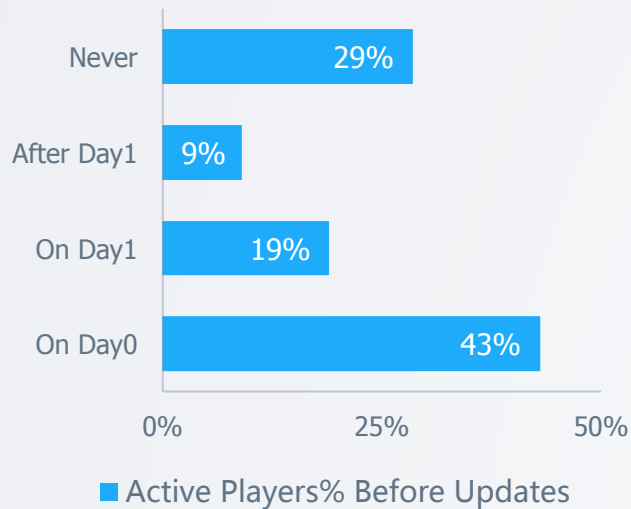
## Do players like to update their games?

### What kinds of problems do updates cause players?

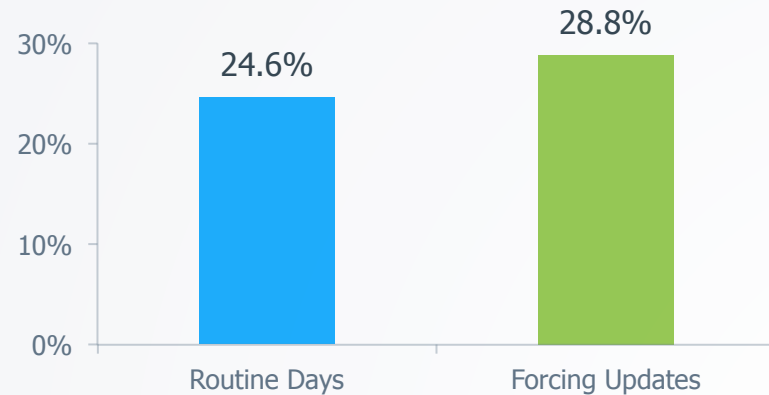
After the release of a game update, **62%** of the existing players update within 2 days. After 2 days, only **9%** of players perform the update.

Almost **30%** of players never perform any updates. Games that adopt required full-package updates cause an increase to the churn rate (criteria: 7 consecutive days without playing a game) on the day of the update.

Every required update causes an exodus of **4.2%** of the existing players.



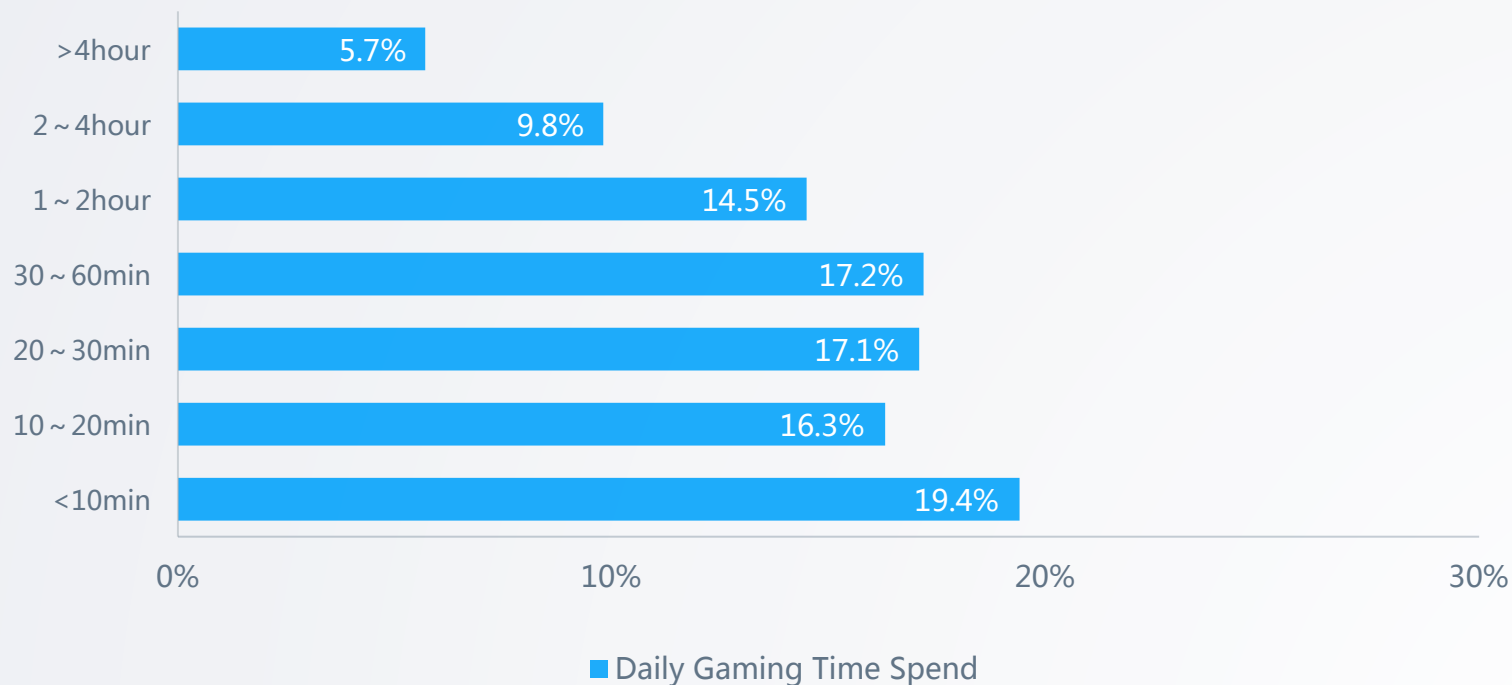
Comparison between churn rate on routine days and forcing update days



- **How much time do players assign to gameplay per day?**

Players spend an average of **32 minutes** per day playing games.

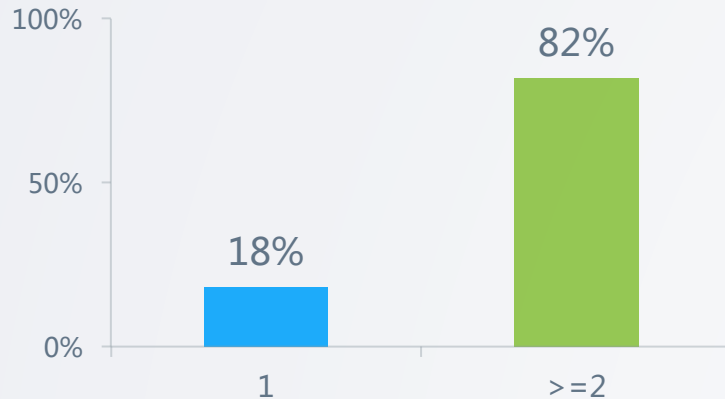
**28%** of players spend **over 1 hour per day** playing games. They are considered heavy or “mid-core” gamers.



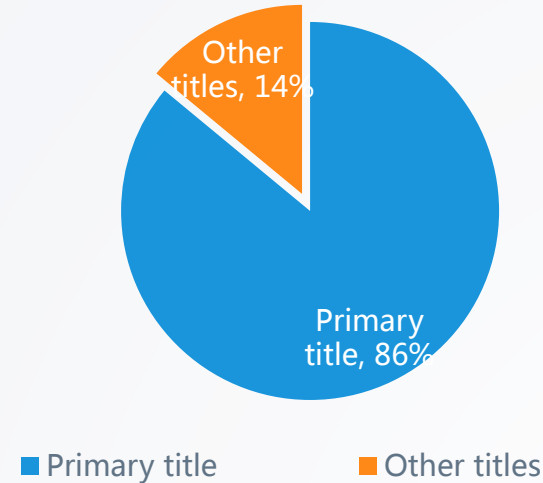
## How many games do players play per day? How do they allocate their time?

**82%** of active gamers play a variety of games every day. However, players only play **2.4** types of games per day on average. They allocate **86%** of their time to their primary games.

Daily gaming titles

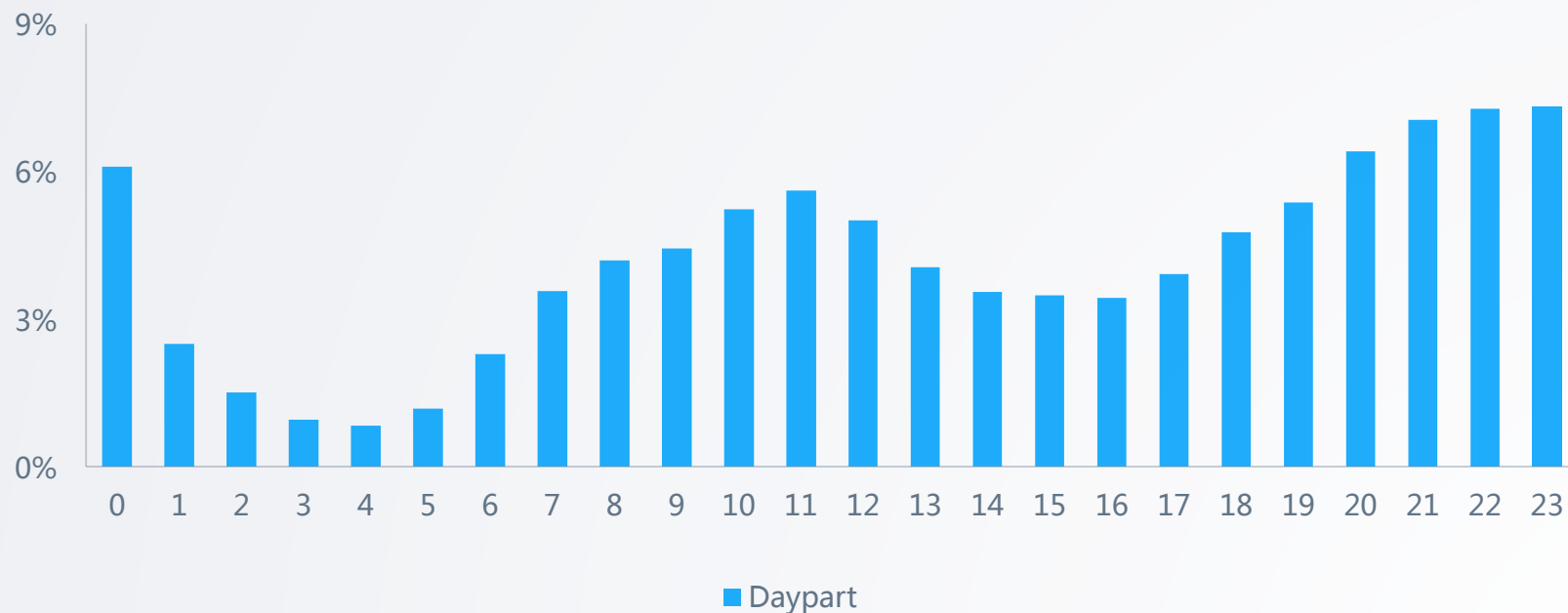


Time allocation for different daily playing games



- **When do players like to play games?**

**Mid-day** and **evenings** are the peak periods for gameplay. Evenings attract many 'night-owl' gamers, and an obvious trend of after-hour gameplay is towards **midnight**.



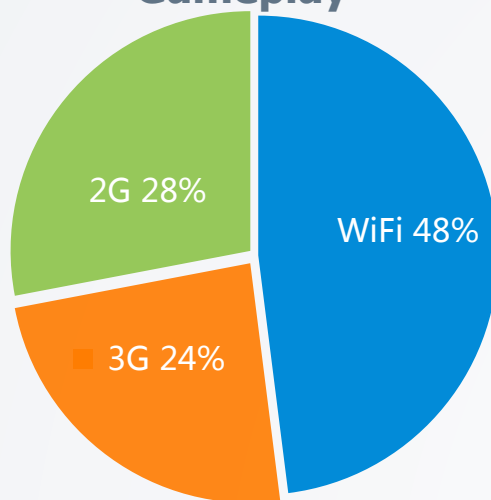


- **What is player connectivity like?**

**74%** of the players use WiFi network connections when they visit the app markets. During gameplays, only **48%** use WiFi.

Compared to the beginning of the year, the proportion of 3G use has gone down rather than up.

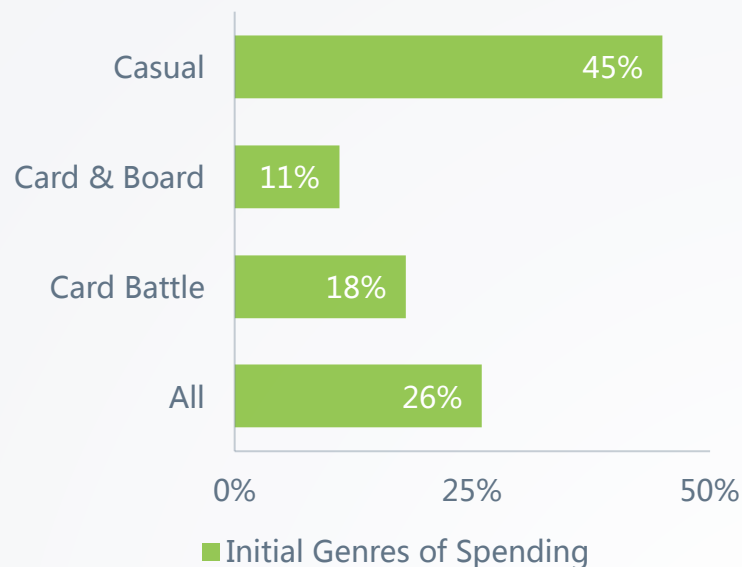
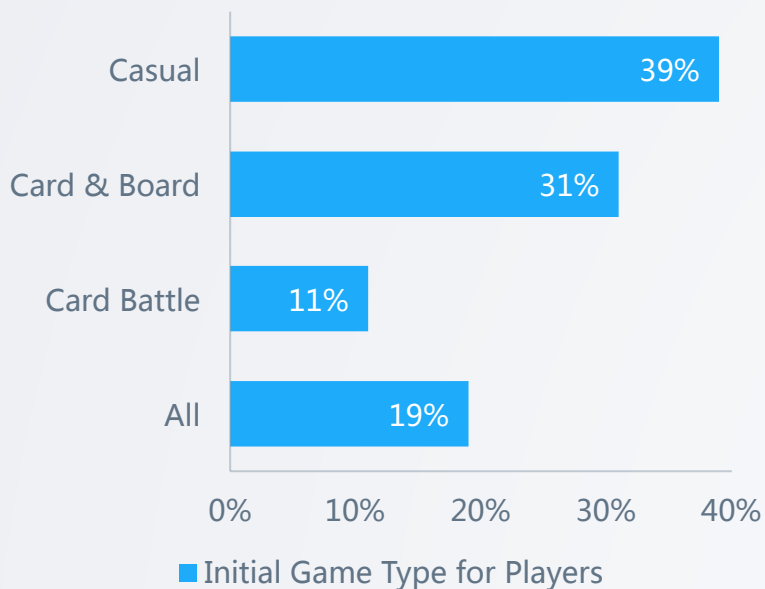
**Connectivity Type During Gameplay**



- **Where do players spend their money?**

**45%** of mobile gamers choose **casual games** as their primary games

**30%** choose **card/strategy games**.

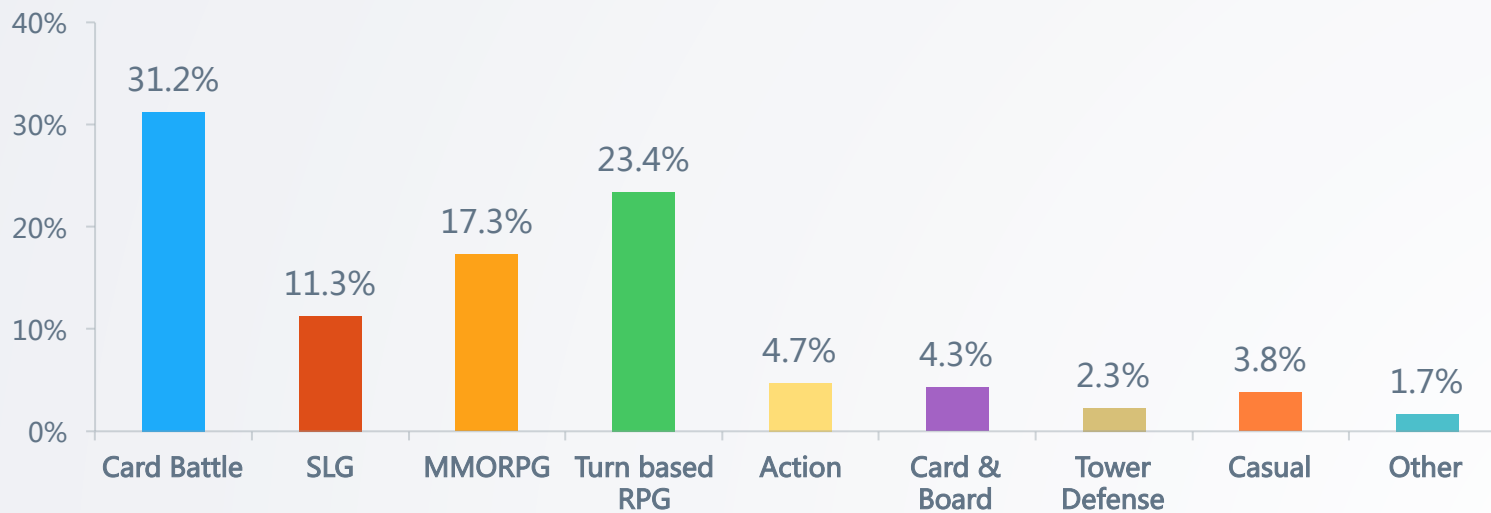


- **On which types of games are players more willing to spend money?**

**Card Battle**, **turn-based RPG**, and **MMORPG** games account for more than 70% of total mobile games' earnings.

The low development cost and high profit return nature of **cards games** is still a key point of attraction for developers. The proportion of earnings from **casual games** have increased.

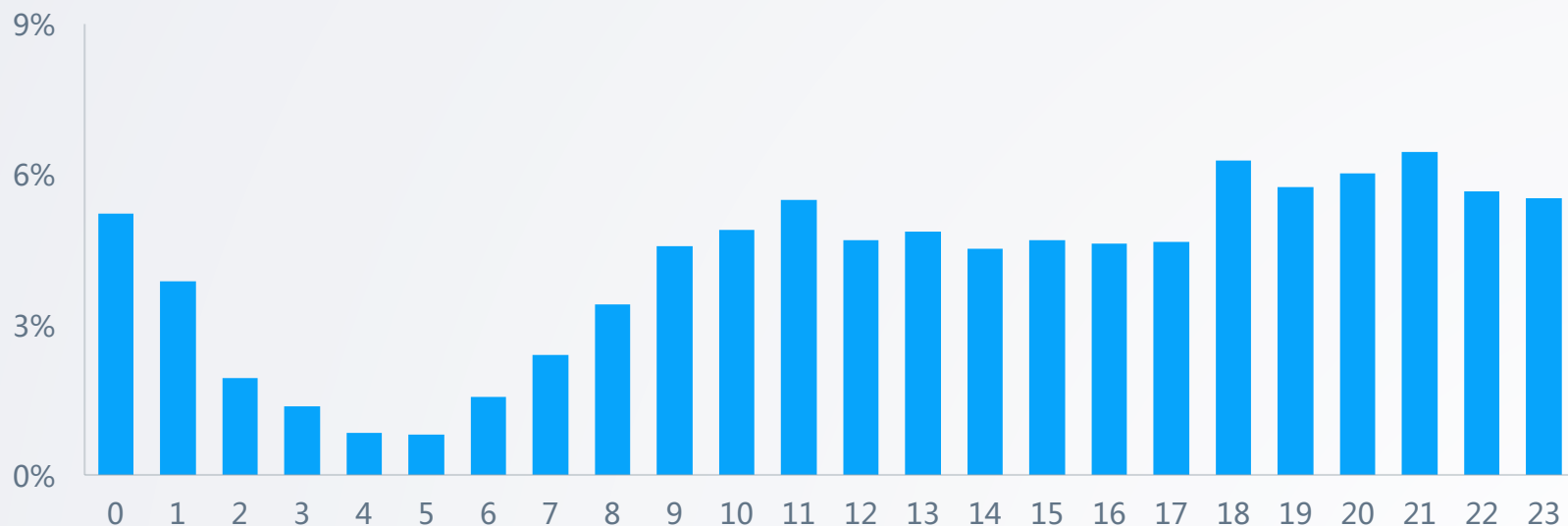
Revenue By Genres



- **When do players like to spend / top-up?**

Spend and topping-up behavior is more evenly spread during the day, particularly for casual games.

As many players play at night, the spend activity also tend to be more focused at night.

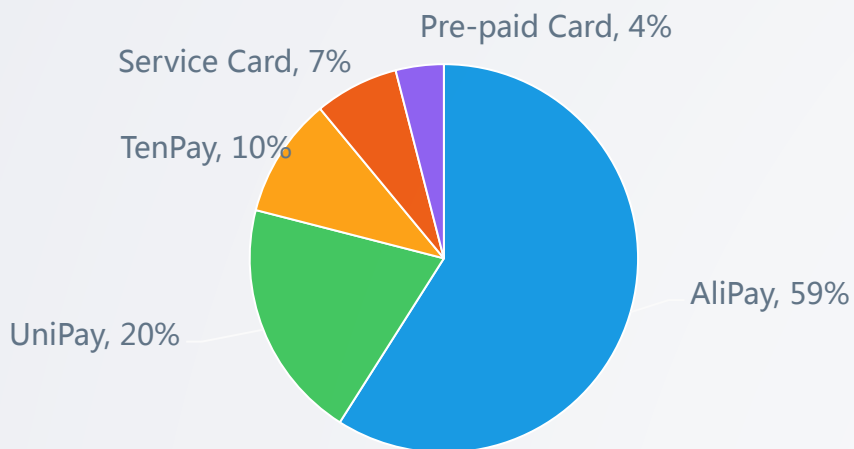


■ Daily Spending Times Distribution

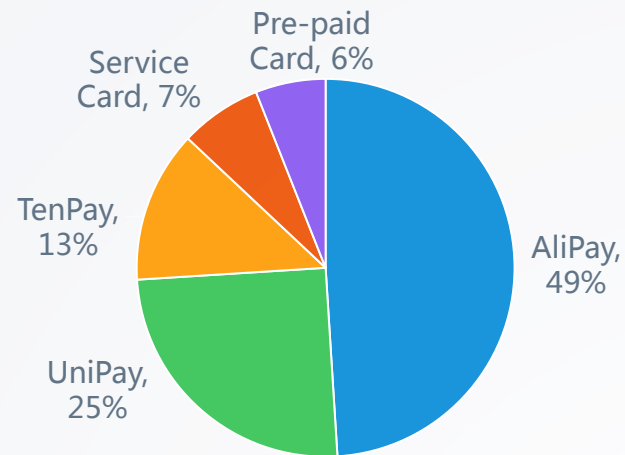
## ● Which payment methods do players prefer?

The proportion of pre-pay cards and service cards are gradually dwindling.

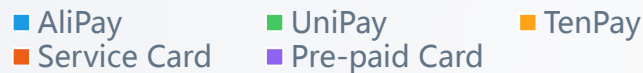
Payment via **Alipay** has become the mainstream pre-pay method.



The ratio of transactions via various payment methods



The Ratio of Spend



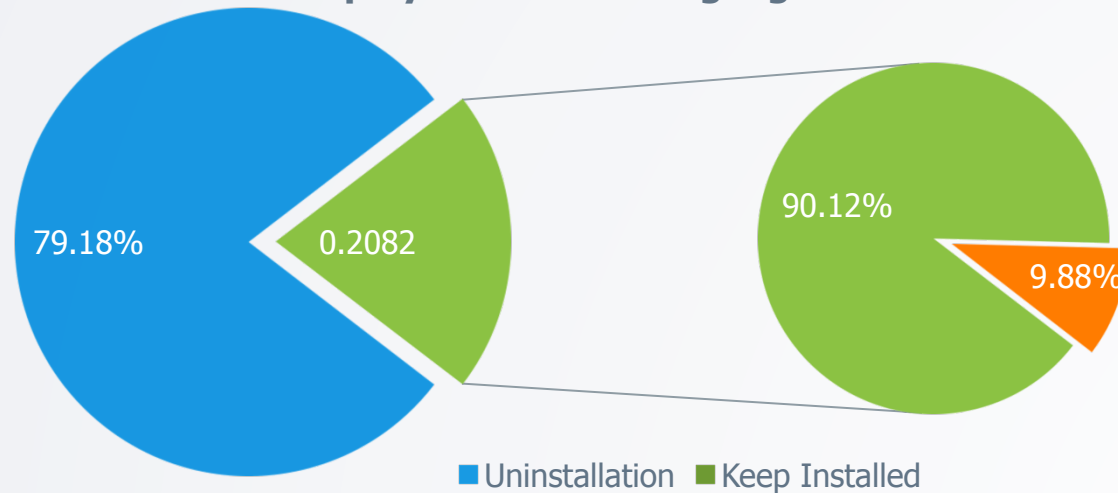


## How long until a player uninstalls a game?

### The performance of "zombie" players in games

Approximately **80%** of players uninstall a game **2.66 days** after abandoning the game. If the player doesn't uninstall the game and doesn't log into the game, then **90%** of them become "zombie" players of the game. For at least one month, the player neither plays nor uninstalls the game. On average, each player becomes a "zombie" player for about **2** games. This accounts for approximately **2.78%** of the game applications on a single device.

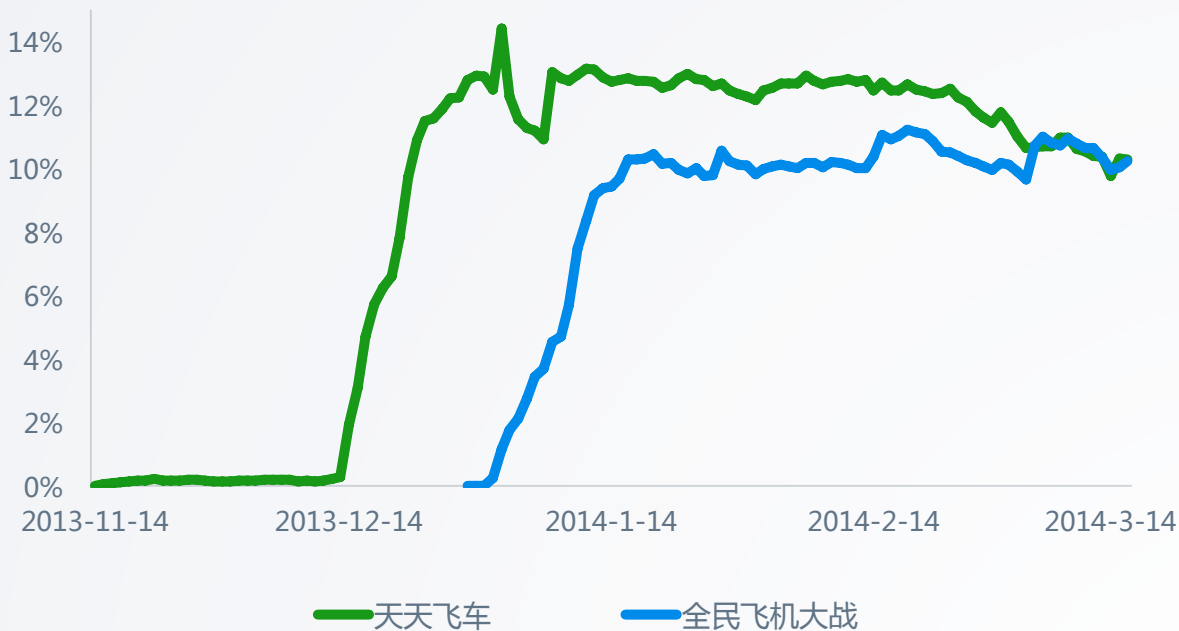
**Proportion of uninstallation occurring within 2.66 days of a player's abandoning a game.**



Abandoning : No login for 3+ consecutive days

## ● WeChat games are phenomenal things

Spread out Virally, retention is good.



# 3

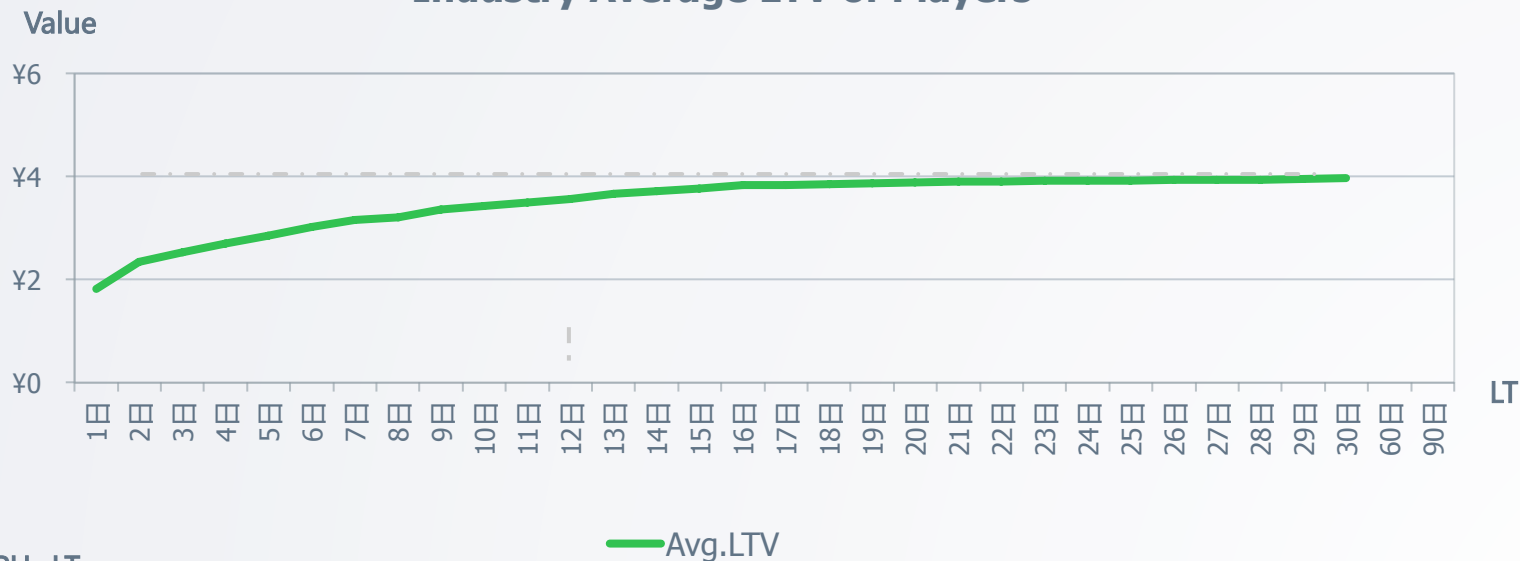
## ***Trending Forecast***

*Operation • Genres • Market size*

- **Enhancing the player's LTV is the focus of 2014**

Mobile game operations has shifted to mirror web game development, highlighted by the phenomenon of short usage life cycles. After **20 days** of gameplay, the player stops deriving value from a game. The average value of the single-player is about **4 RMB (less than \$1)** overall.

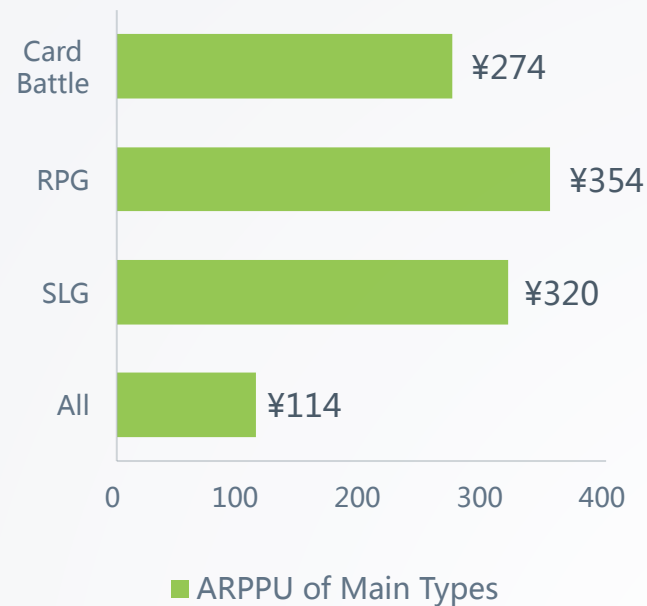
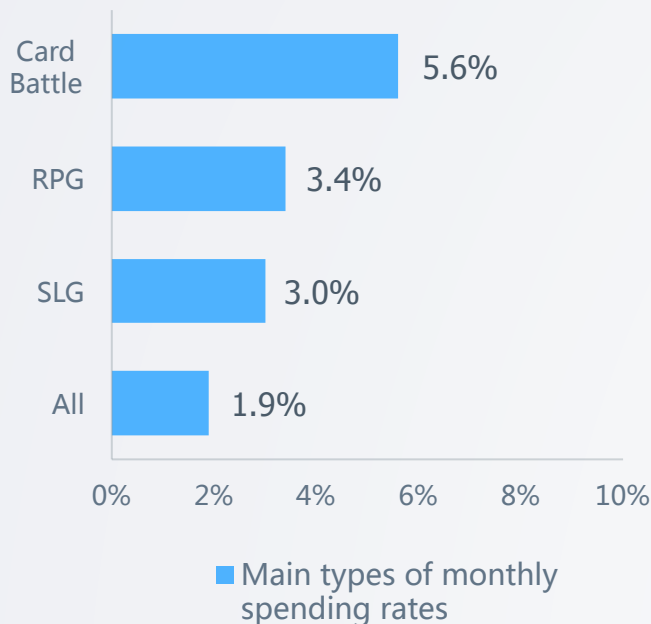
**Industry Average LTV of Players**



$$LTV = ARPU \times LT$$

## With their frequent payment rates and high spending amounts, RPG & card battle are expected to continue their strong performance in 2014

Single-player user experience game spend continue to do well. **RPG & Card Battle** are expected to continue their strong performance in 2014.

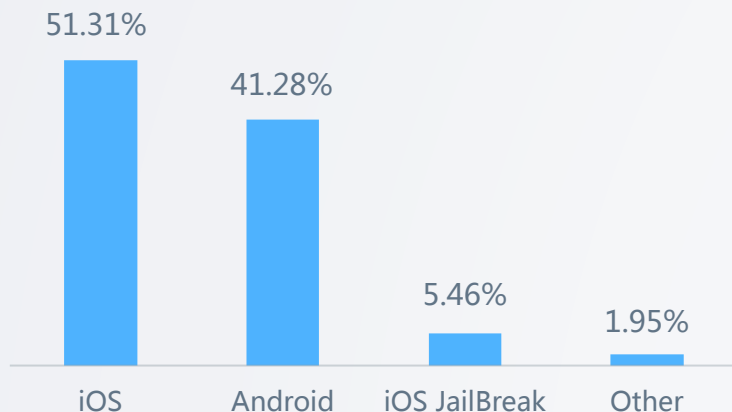


- **As a contributor to the future earnings of RPG games, iOS is still a focal point**

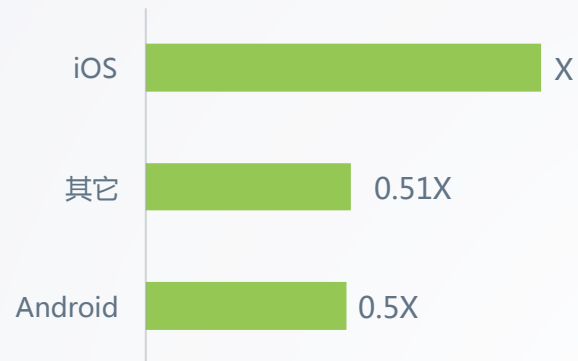
In 2013, the RPG game earnings that focused on iOS players accounted for 57%. This is mainly due to the characteristic of iOS gamers and the higher-level device support afforded by iOS to high-quality RPG games.

The number of Android players on ARPPU is about **half** that of iOS players. Although ARPPU is slightly better on other operating systems than Android, their number tends to be small, and needs to be observed in the long-term.

RPG Revenue by OSs

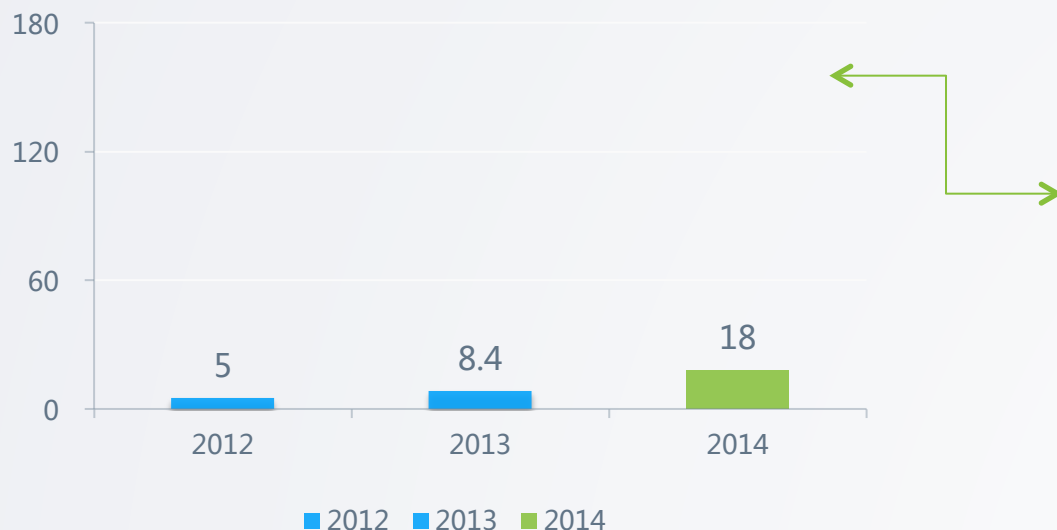


RPG ARPPU by OSs



- In 2014, the opportunity is up to **\$3.5-4.0 billion**.

Revenue Size Of The Chinese Mobile Gaming Market ( Billion RMB )



#### Formula Behind

2014 Total players: **780m**

2014 Paid User%: **11.8%**

2014 ARPU: **¥ 198**

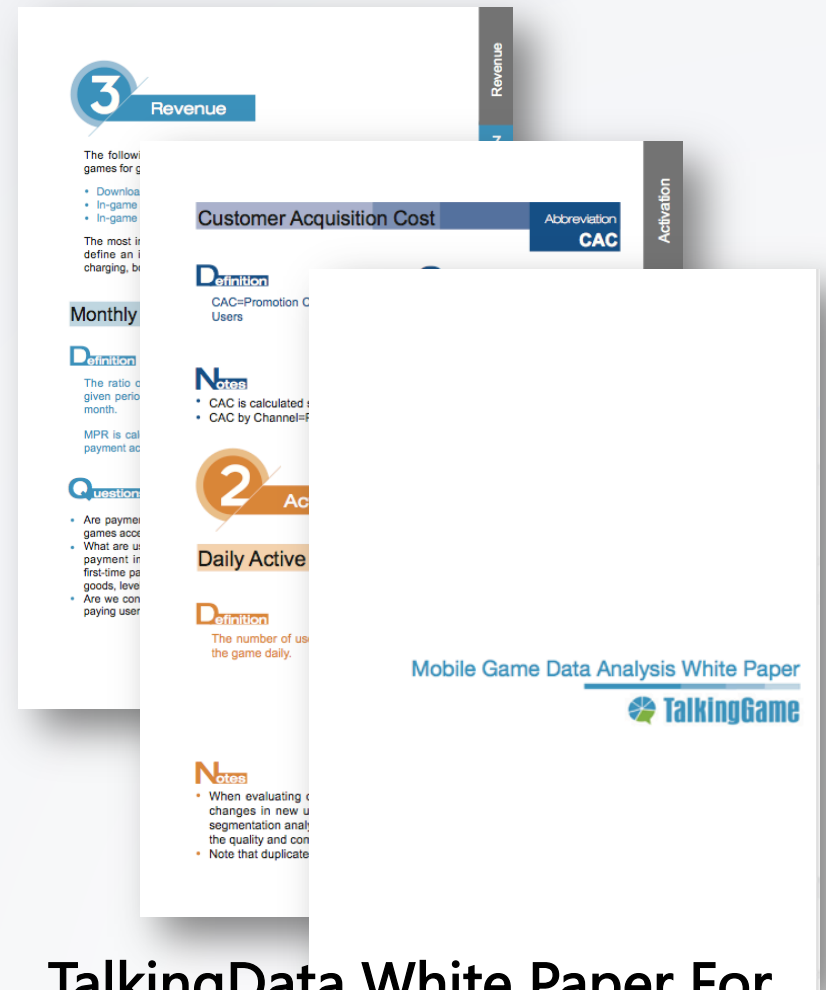
=

Total Revenue :

**¥ 18B**



## TalkingData AARRR Model For Mobile Game Operation



## TalkingData White Paper For Mobile Game Data Analysis





## Versions

Initial release : Sep 14, 2012

Second version : Nov 1, 2012

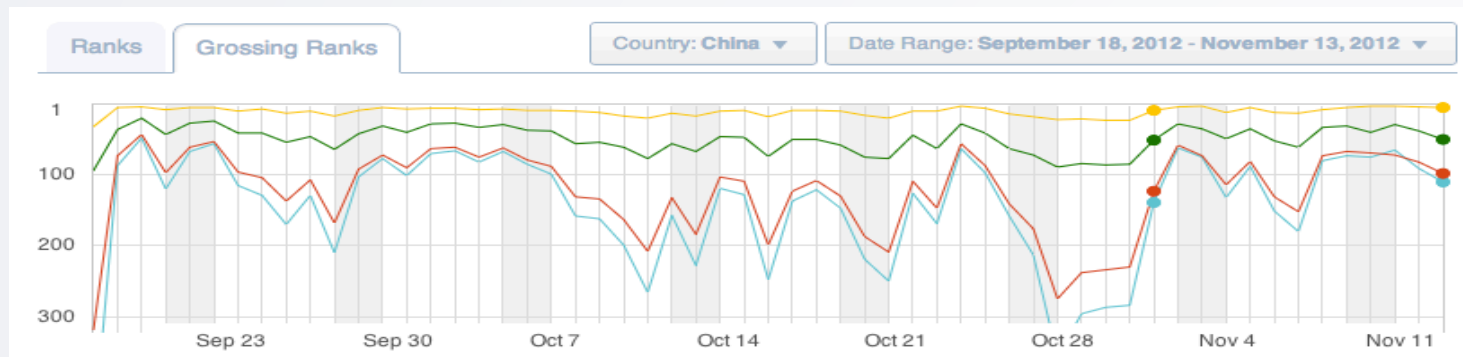
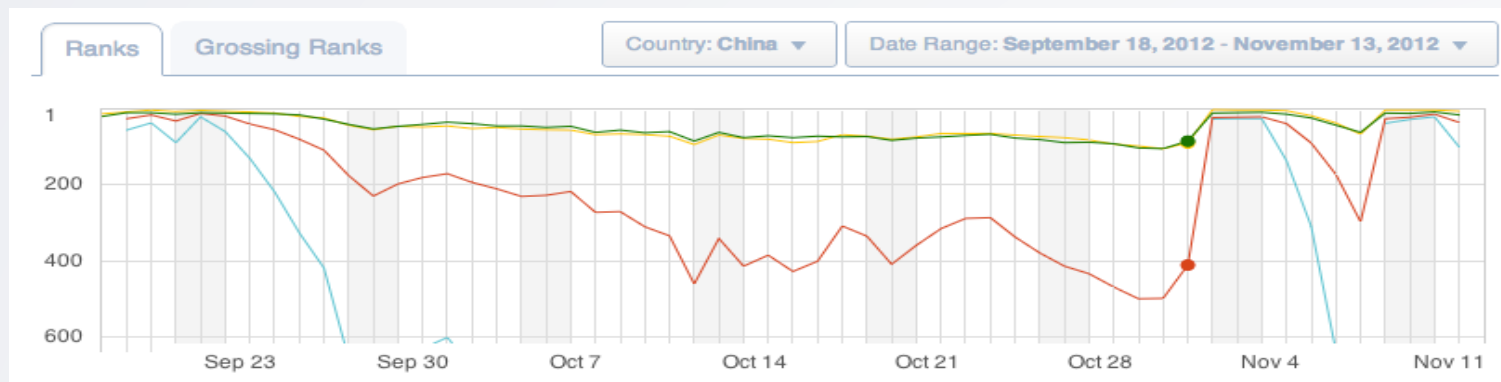
## Description

★ TouchArcade.com HOT  
NEW GAME ★

Puzzle + Battle  
+ Collection + EDU



# Test in App Store , without marketing



Overall

Games

Puzzle

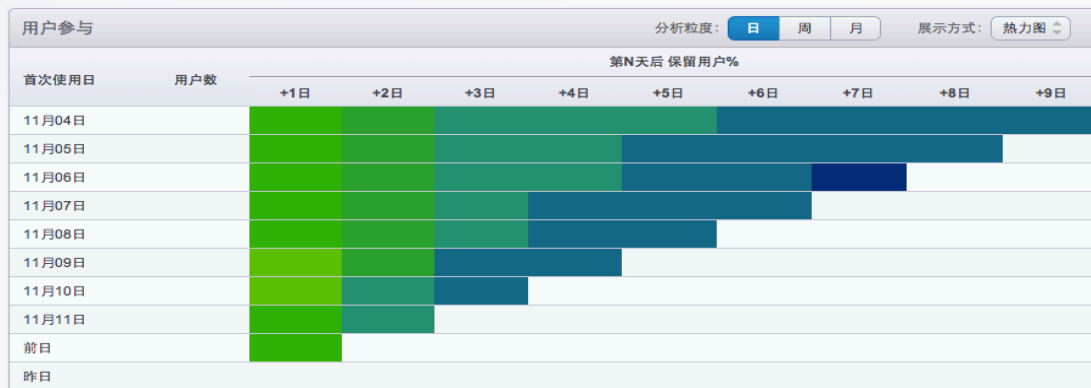
Strategy

# KPI

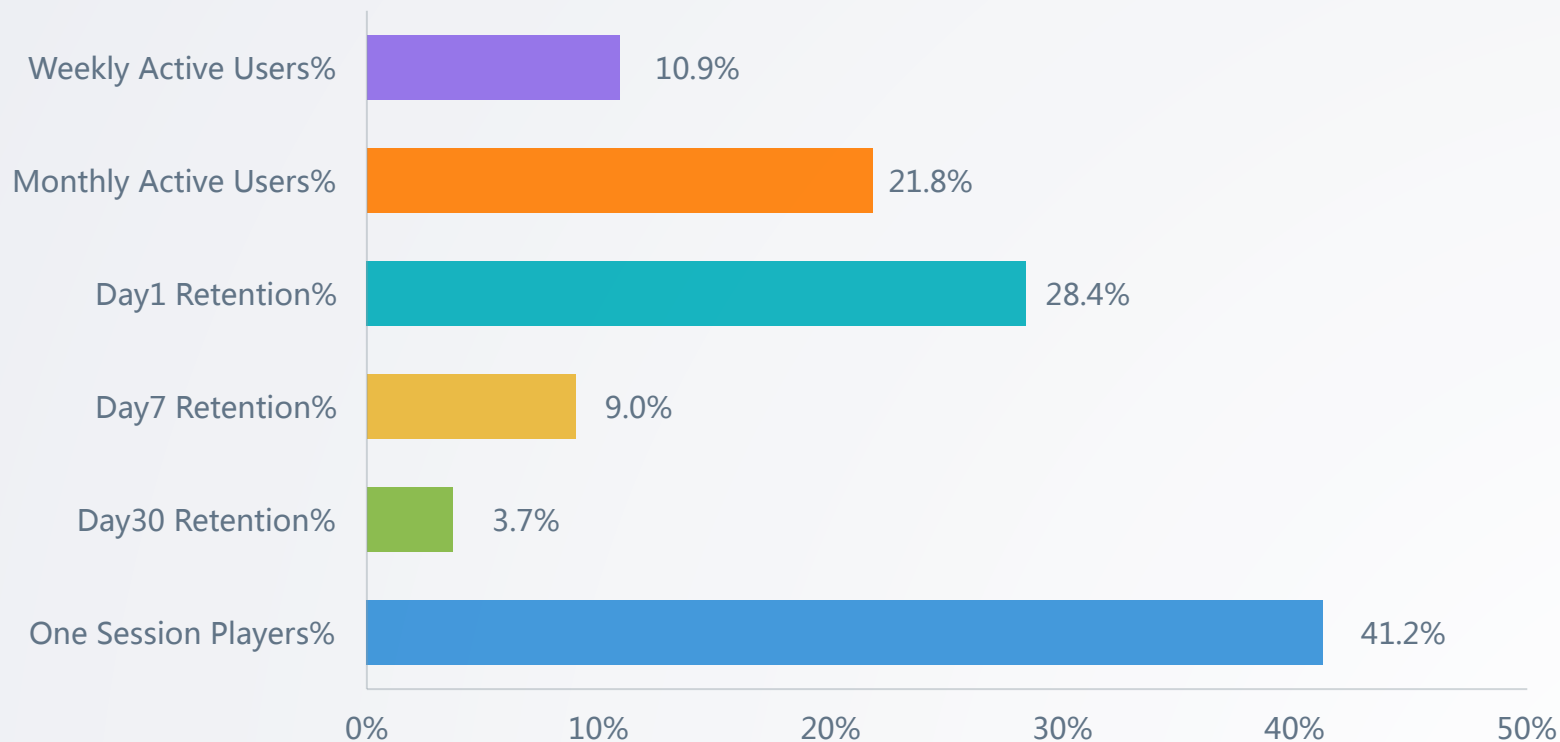
## How to optimize?

Dashboards and Alerts – Why did it Happen? – Advantage - Dashboards

- DAU
- Day 1 retention
- Day 7 retention
- Virtual income
- Marketing Users



- **Benchmark concerning recent key indicators of the mobile gaming industry**



# Day 1 Retention

The most Important Metric **between** Initial release.

- The first experience
- WHY ? It's been relatively Low

Day 1 Retention

Avg. **18.2%**



## Alert

# Bad Day 1 retention, but kind of okay of Day2.

用户留存

分析粒度

日

周

月

展示方式

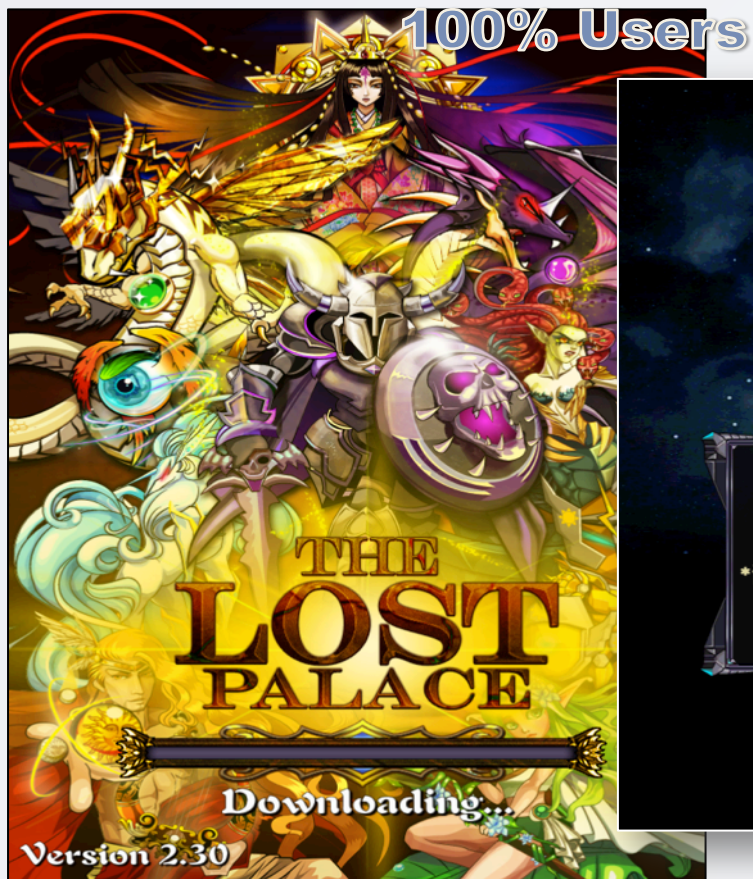
热力图

首次使用日期	用户数	第N天后 留存用户%								
		+1	+2	+3	+4	+5	+6	+7	+8	+9
9月18日	100%	18.2%	16.1%	14.8%	13.3%	11.3%	9.3%	9.3%	8.4%	8.0%
9月19日	100%	18.1%	17.1%	13.8%	12.4%	11.4%	9.6%	7.8%	7.2%	
9月20日	100%	17.9%	17.3%	13.3%	11.0%	11.2%	7.4%	7.6%		
9月21日	100%	16.9%	15.1%	12.6%	11.2%	10.2%	8.5%			
9月22日	100%	18.2%	15.8%	12.1%	12.5%	10.5%				
9月23日	100%	18.1%	16.1%	13.1%	11.4%					
9月24日	100%	17.8%	16.9%	14.8%						
9月25日	100%	18.0%	16.5%							
9月26日	100%	17.4%								
9月27日	100%									

Why?

B

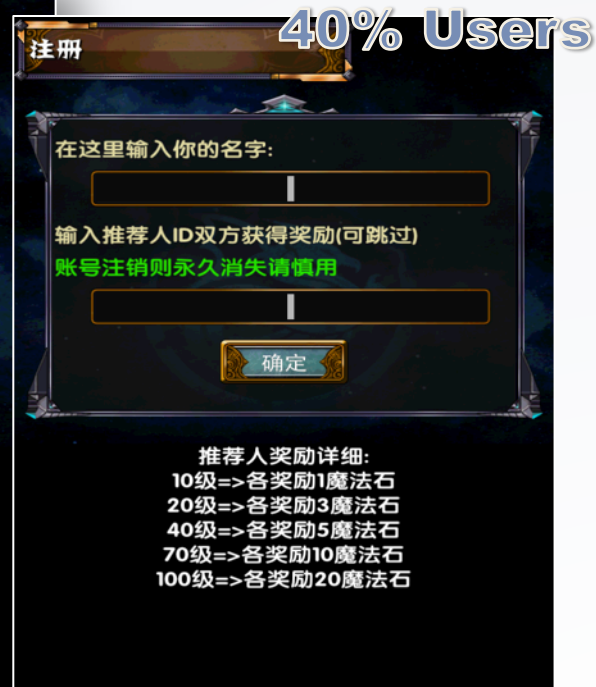




Loading



Connect



Sign up

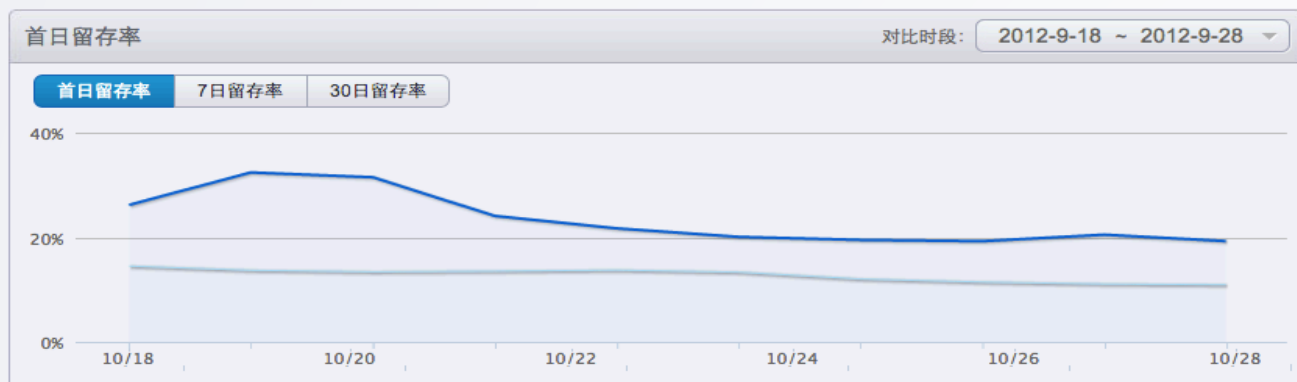
## Funnel analysis to find pitfalls of game design





## How to optimize?

- Move to more reliable data center
- Consider domestic and overseas server distribution
- Simplify introduction, less steps
- Embellish introduction
- Polish pet UI to make it more attractive



# Day 7 Retention

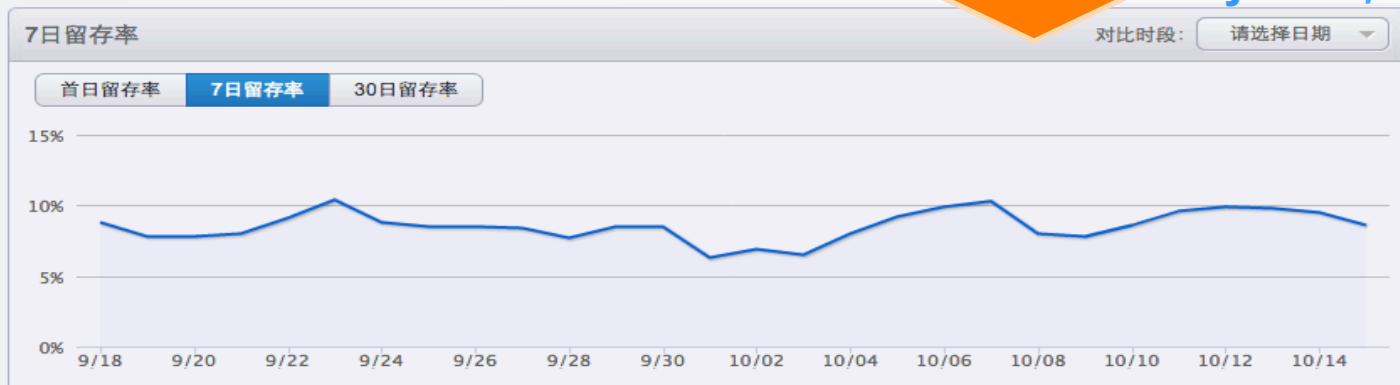
Difficulty ? Operation.

- Daily awards
- Know players progress
- Pay attention to degree of difficulty of early levels

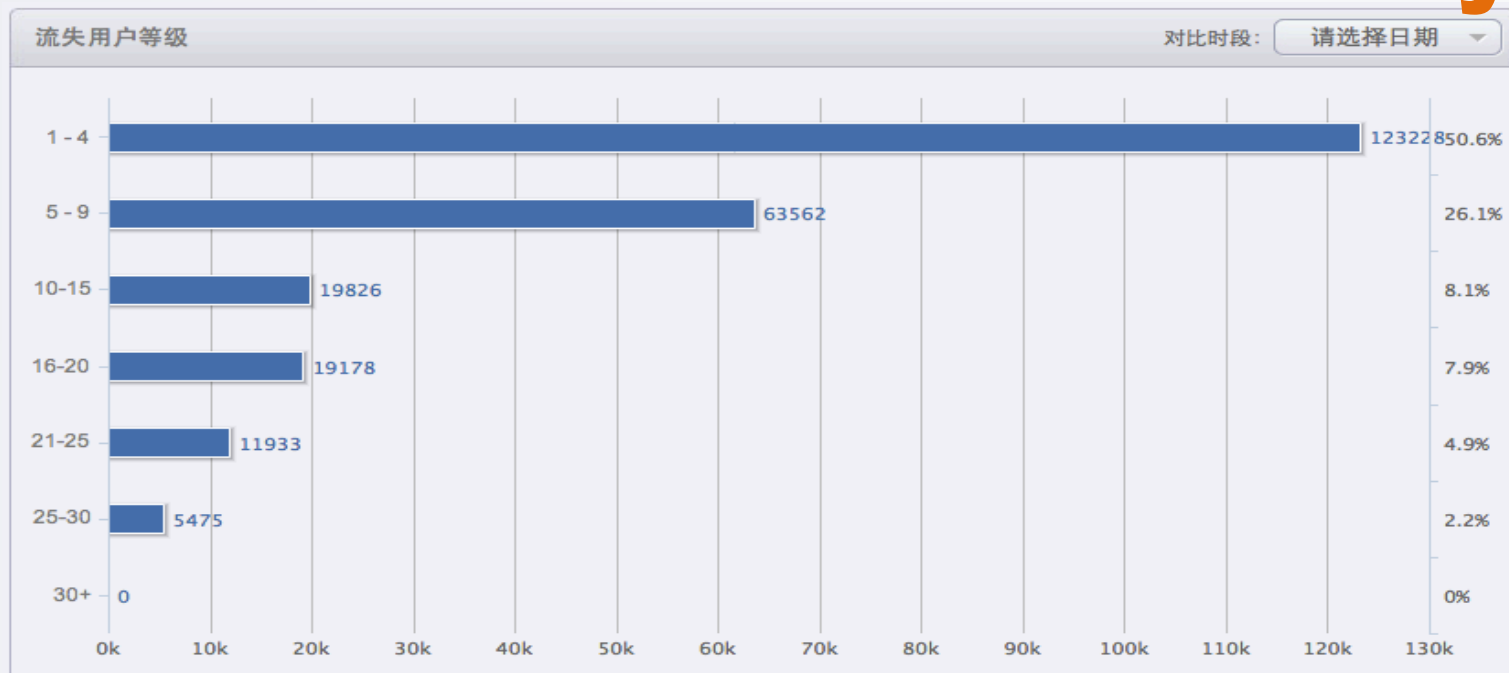


- Daily task
- Login bonus
- Scheduled copy
- Bonus pet
- Friends aid

Only 9 % , WHY ?



# Difficulty?

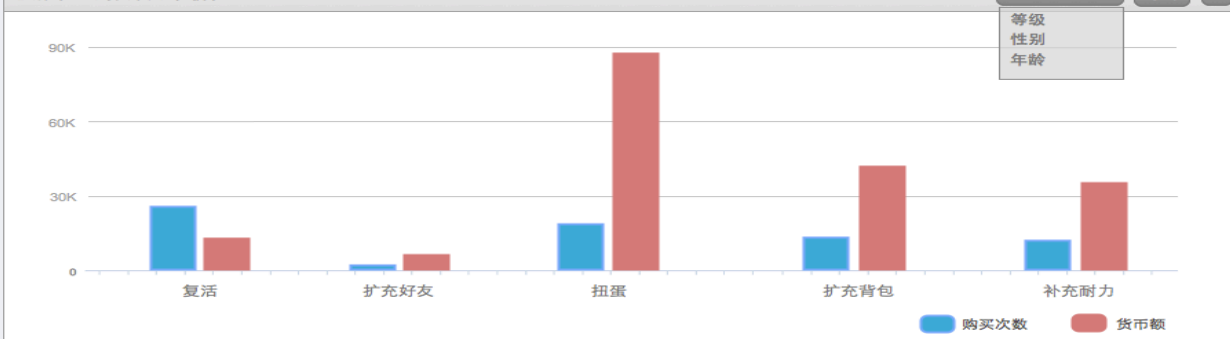


# Virtual income

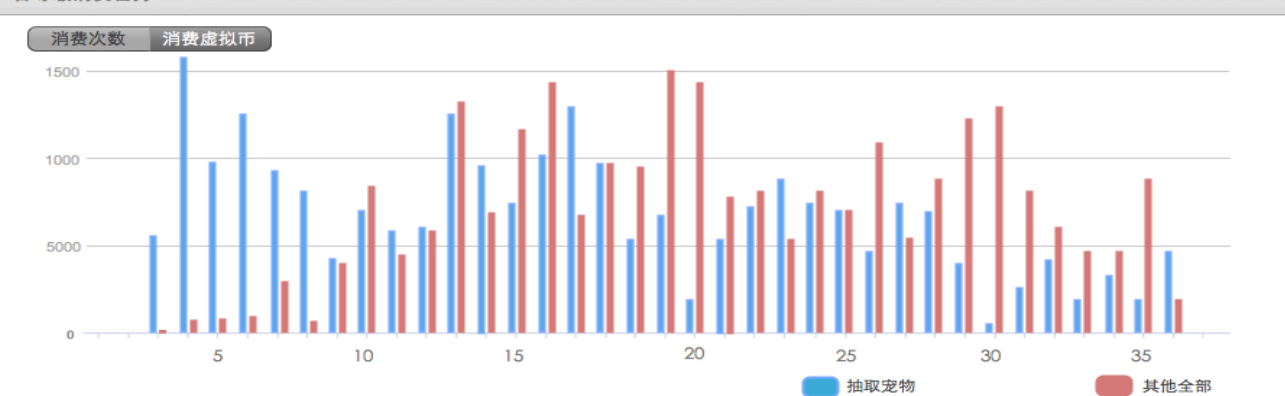
Make more money.

- A/B test
- Drill down
- Whale

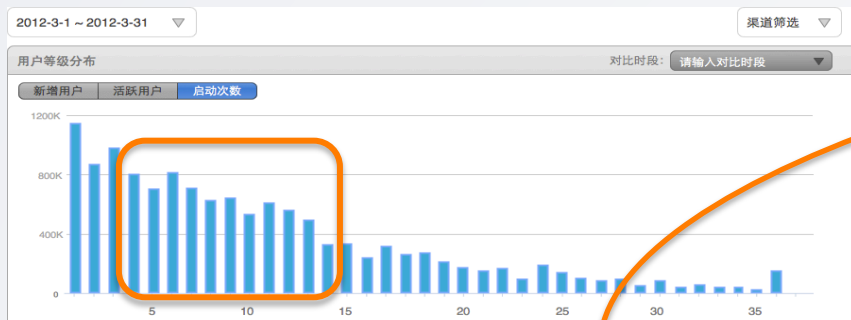
虚拟物品购买次数和价值



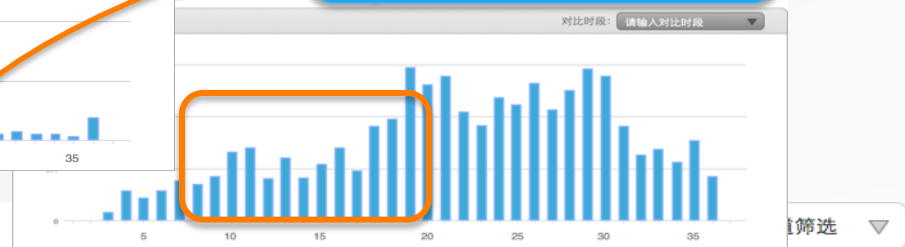
各等级消费喜好



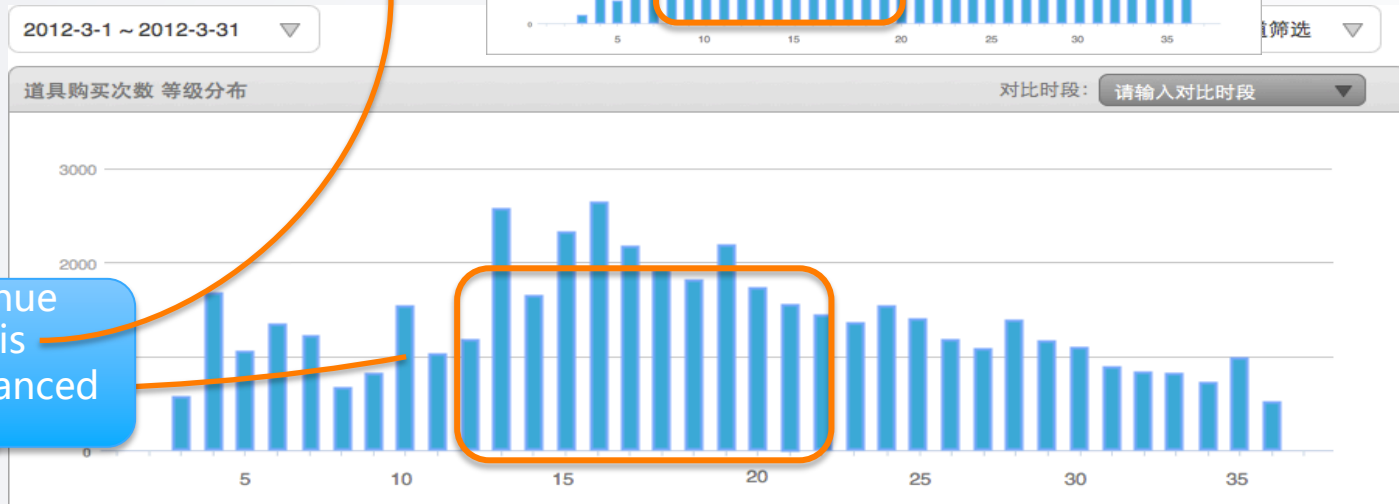
# How to optimize in app purchase?



Is it possible to let more players make purchase earlier?



Compared to revenue graph, purchase is distributed more balanced and forwarding





# What's your opinions?

Extra gems?

Bonus pets?



# The result of new version is great!



# Thanks

---

[www.talkingdata.com](http://www.talkingdata.com)

[www.talkinggame.com](http://www.talkinggame.com)

[leo.cui@talkingdata.com](mailto:leo.cui@talkingdata.com)

---

